



Department of Energy

Argonne Site Office
9800 South Cass Avenue
Argonne, Illinois 60439

JAN 11 2013

OFFICE OF THE DIRECTOR
ARGONNE NATIONAL LABORATORY
2013 JAN 14 PM 0:00

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Action:	Yes <input type="checkbox"/> No <input type="checkbox"/>
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OTD File #:	—

Dr. Eric D. Isaacs
Director, Argonne National Laboratory
President, UChicago Argonne, LLC
9700 South Cass Avenue
Argonne, IL 60439

Dear Dr. Isaacs:

SUBJECT: NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) DETERMINATION FOR ARGONNE NATIONAL LABORATORY (ARGONNE)

The Argonne Site Office (ASO) has approved the following as a categorical exclusion (CX) under the category of "B 3.6 Siting/construction/operation/decommissioning of facilities for bench-scale research, conventional laboratory operations, small-scale research and development and pilot projects:"

- Argonne Joint Center for Energy Storage Research (JCESR) (ASO-CX-294)

Therefore, no further NEPA review is required. However, if any modification or an expansion of the scope is made to the above project, additional NEPA review will be necessary.

Enclosed please find a copy of the approved Environmental Review Form (ERF) for the project. If you have any questions, please contact Kaushik Joshi of my staff at (630) 252-4226.

Sincerely,

Joanna M. Livengood
Manager

Enclosure:
As Stated

- cc: J. Stauber, ANL/FMS, w/encl.
M. Finder, ANL/FMS, w/encl.
J. Budd, ANL/FMS, w/encl.
S. Heston, ASO, w/encl.
P. Siebach, SC-CH, w/encl.
M. McKown, SC-CH, w/o encl.
K. Joshi, ASO, w/o encl.
J. Blackistone, SC-31, w/encl.

0113-011

Environmental Review Form for Argonne National Laboratory

Click on the question mark for instructions, contacts, and additional information on specific line items (?)

Project/Activity Title: JCESR Energy Innovation Center

ASO NEPA Tracking No. ASO-CX-294 **Type of Funding:** DCEO Grant

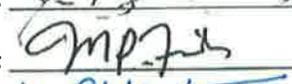
B&R Code _____

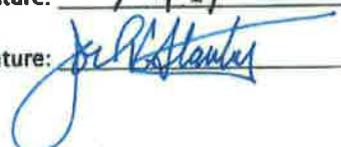
Identifying number: OPS 01212R1 **WFO proposal #** P-12111 **CRADA proposal #** _____

Work Project # _____ **ANL accounting # (item 3a in Field Work Proposal)** _____

Other (explain) NEPA Log # 1485

Project Manager: J. Budd **Signature:**  **Date:** 12/13/12

NEPA Owner: M. Finder **Signature:**  **Date:** 12/13/2012

ANL NEPA Reviewer: Joel Stauber **Signature:**  **Date:** 12/13/12

I. **Description of Proposed Action:**

This action proposes to design and construct a new building at Argonne National Laboratory. The Energy Innovation Center (EIC) will support Argonne's Energy Storage Hub research; known as the Joint Center for Energy Storage Research (JCESR). Some general details about the construction and operation of the facility are:

- 1) The EIC will consist of a two-story mixed lab/office building configuration. The 45,000 square foot building will be located adjacent to building 212. Refer to Figures 1 and 2 for a conceptual building and site location.
- 2) The subject site area has been previously disturbed and the majority of the site is currently in use as a parking lot. In addition, two small areas east and north of the site that are currently grass covered will be impacted by construction as part of the project.

The construction of the facility will require the excavation and removal of asphalt, dirt and gravel for placement of concrete foundations, and connection to utility services. The facility will have standard utility services such as power, steam, lab, sanitary, and storm sewer systems. The improved services will include driveways, parking areas, and sidewalks. Charging stations for electric vehicles will be incorporated into facility design.



Figure 1. Energy Innovation Center Conceptual Model



Figure 2. Project Location for Energy Innovation Center

II. Description of Affected Environment:

Construction will occur in a previously disturbed area. The proposed building location is an existing asphalt parking lot. Other system utilities will impact previously disturbed grass areas. Other discharges from ventilation and water systems are not expected to negatively impact the environment. Selected design concepts are expected to improve the environment in the area.

III. Potential Environmental Effects: (Attach explanation for each "yes" response. See Instructions for Completing Environmental Review Form)

A. Complete Section A for all projects.

1. Project evaluated for Pollution Prevention and Waste Minimization opportunities and details provided under items 2, 4, 6, 7, 8, 16, and 20 below, as applicable Yes No

2. Air Pollutant Emissions Yes No

Minor emissions from cars, construction vehicles and construction equipment (diesel generator) will occur during the construction period. Minor dust may be generated from the excavation activities. Emergency generator impacts and facility discharges will be addressed during the preliminary design. If the size of the emergency generator exceeds 1118 Kw or 1500 HP in size, then an air permit will be required.

3. Noise Yes No

During construction of the new facility, standard construction noises from excavation, cranes, earth moving and other construction equipment will occur. General noise levels will be below 85 dba. In the event certain specific noises may exceed the maximum levels, temporary protection will be put in place. Final facility operations will not generate noise levels above permitted limits.

4. Chemical Storage/Use Yes No

During the construction of the facility, standard construction chemicals and materials requiring MSDS sheets will be stored and used. Spill control procedures will be in place per the Laboratory's SWPPP and the Site Specific Erosion Control Plan.

5. Pesticide Use Yes No

There will be no pesticide use during the construction and initial operations. In the long run, some pesticide use may occur due to natural infiltrations of bugs, wasps, that will be controlled for safety.

6. Polychlorinated Biphenyls (PCBs) Yes No

The project is not expected to have contact with any PCB containing parts. However, during design these items will be verified.

7. Biohazards Yes No

8. Liquid Effluent (wastewater) Yes No

An erosion control plan and Storm Water Pollution Prevention Plan (SWPPP) shall be in place during construction activities to prevent silt laden water from entering the work area and control runoff to storm water system. Once operational, the EIC will be a new generator of waste streams to the sanitary sewer and laboratory sewer systems. These waste streams are not new to ANL systems, however the quantity will be evaluated to determine impact to the existing NPDES permit and assess whether a revised permit is needed.

9. Waste Management

a) Construction or Demolition Waste Yes No

Standard construction debris from construction activities will be generated. The project will endeavor to collect and segregate construction debris at the job site such as wood, metals, paper, plastic, etc. per High Performance Sustainable Buildings Guiding Principles. Excess concrete, asphalt, clean gravel and earth will be recycled at the EIC site or off site.

b) Hazardous Waste Yes No

Currently no hazardous waste sources have been identified. During design, these items will be verified.

c) Radioactive Mixed Waste Yes No

d) Radioactive Waste Yes No

e) PCB or Asbestos Waste Yes No

The project is not expected to have contact with any PCB or asbestos containing parts.

f) Biological Waste Yes No

g) No Path to Disposal Waste Yes No

h) Nano-material Waste Yes No

10. Radiation Yes No

11. Threatened Violation of ES&H Regulations or Permit Requirements Yes No

During design ES&H representatives will be reviewing the project to identify potential violations of regulations or required permits. At this time, the project has not identified violations of ESH regulations or permit requirements.

12. New or Modified Federal or State Permits Yes No

The project site is larger than 1 acre. As a result, a SWPPP permit will be required to identify how the project will control the flow of storm water and prevent erosion. This permit will be approved by the Illinois EPA prior to construction start. Argonne will also need a Permit to Connect for the sewer systems and may require a modification to the NPDES permit to reflect the addition of sources to our existing laboratory and sanitary sewer systems. An Argonne Erosion Control Plan is also required during the construction phase of the project. Upon completion of the project the building will be incorporated into the site-wide SWPPP.

13. Siting, Construction, or Major Modification of Facility to Recover, Treat, Store, or Dispose of Waste Yes No

14. Public Controversy Yes No

15. Historic Structures and Objects Yes No

The location of the site is near and within the view shed of the Inner Circle Historical district. As such a review will be required and concurrence received from the SHPO.

16. Disturbance of Pre-existing Contamination Yes No

17. Energy Efficiency, Resource Conserving, and Sustainable Design Features Yes No

The new building will meet the High Performance Sustainable Buildings features for New Building Construction. The building will employ many sustainable design features including a light and ventilation tower, North facing clearstory, operable windows, chilled beams for cooling, and a heat collector chimney for winter heating. Materials used for the general construction of the facility will endeavor to meet the minimum standards identified in the High Performance Sustainable Buildings Guiding Principles. The chosen site is a previously disturbed area avoiding the disruption of wetlands or removal of trees.

For projects that will occur outdoors, complete Section B as well as Section A.

18. Threatened or Endangered Species, Critical Habitats, and/or other Protected Species Yes No

Illinois Dept of Natural Resources has reviewed the proposed site location (EcoCAT #1303053). No impacts were identified.

19. Wetlands Yes No

Wetlands will not be disturbed. However, storm water control could impact existing wetlands in the area. Appropriate design measures will be taken to avoid negatively impacting the wetlands upstream of the site during construction activities.

20. Floodplain Yes No

21. Landscaping Yes No

The existing foot print is mostly on a paved surface. Minor extensions of the work will be in grass areas. Where appropriate, natural landscaping will be reintroduced to the surrounding areas of the EIC including trees, shrubs, and grasses.

22. Navigable Air Space Yes No

23. Clearing or Excavation Yes No

The proposed size of the EIC is two story, 45,000 square foot building. Actual dimensions of the EIC will be determined during design however current estimates are approximately 100' x 225'. Site work will include the removal of the existing asphalt surface, existing sub-base gravels and sub-grade clays to install the necessary foundations. Storm water systems existing in the area will be modified to account for utility system additions and improvements. Underground power and process sewers will be excavated for. An estimated 8,000 CY of material may be managed.

24. Archaeological Resources Yes No

25. Underground Injection Yes No

26. Underground Storage Tanks Yes No

27. Public Utilities or Services Yes No

28. Depletion of a Non-Renewable Resource Yes No

B. For projects occurring outside of ANL complete Section C as well as Sections A and B. N/A

29. Prime, Unique, or Locally Important Farmland Yes No

30. Special Sources of Groundwater (such as sole source aquifer) Yes No

31. Coastal Zones Yes No

32. Areas with Special National Designations (such as National Forests, Parks, or Trails) Yes ___ No ___

33. Action of a State Agency in a State with NEPA-type Law Yes ___ No ___

34. Class I Air Quality Control Region Yes ___ No ___

IV. Subpart D Determination: (to be completed by DOE/ASO)

Are there any extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal? Yes ___ No X

Is the project connected to other actions with potentially significant impacts or related to other proposed action with cumulatively significant impacts? Yes ___ No X

If yes, is a categorical exclusion determination precluded by 40 CFR 1506.1 or 10 CFR 1021.211? Yes ___ No ___

Can the project or activity be categorically excluded from preparation of an Environment Assessment or Environmental Impact Statement under Subpart D of the DOE NEPA Regulations? Yes X No ___

If yes, indicate the class or classes of action from Appendix A or B of Subpart D under which the project may be excluded. Appendix B 3.6 Siting/construction/operation/decommissioning of facilities for bench-scale research,
If no, indicate the NEPA recommendation and class (es) of action from Appendix C or D to Subpart D to Part 1021 of 10 CFR. conventional laboratory operations, small-scale research and development and pilot projects.

ASO NEPA Coordinator Review: Kaushik Joshi

Signature: K Joshi Date: 1-9-2013

ASO NCO Approval of CX Determination:

The preceding pages are a record of documentation that an action may be categorically excluded from further NEPA review under DOE NEPA Regulation 10 CFR Part 1021.400. I have determined that the proposed action meets the requirements for the Categorical Exclusion identified above.

* Signature: Peter R. Siebach Date: 1/9/2013

Peter R. Siebach
Acting Argonne Site Office NCO

* Contingent upon SHPO approval.

ASO NCO EA or EIS Recommendation:

Class of Action: _____

Signature: _____

Date: _____

Peter R. Siebach
Acting Argonne Site Office NCO

Concurrence with EA or EIS Recommendation:

CH GLD: _____

Signature: _____

Date: _____

ASO Manager Approval of EA or EIS Recommendation:

An ____ EA ____ EIS shall be prepared for the proposed _____ and
_____ shall serve as the document manager.

Signature: _____

Date: _____

Dr. Joanna M .Livengood
Manager